


Name: Answers

Date: _____

1. Explain how the Particle Theory of Matter explains why a ~~gas~~^{liquid} is less viscous than a ~~liquid~~^{gas} when the temperature is increased.

Although, ^{gas} gas particles are farther apart, when heated, they collide more often and this slows the flow.

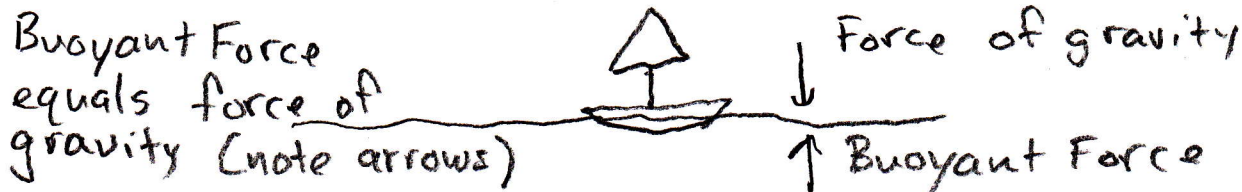
2. What is "Archimedes Principle"?

The buoyant force acting on an object equals the weight of the fluid displaced by the object.

3. Define viscosity.

the measure of how fast a fluid will flow; the thickness or thinness of a fluid.

4. Use a fully labeled drawing to explain why a boat floats.



5. Calculate the missing densities.

Mass (m)	Volume (V)	Density (D)
50 g	10 ml	$\frac{50}{10} = 5 \text{ g/ml}$
100 g	200 ml	$\frac{100}{200} = 0.5 \text{ g/ml}$
20 g	20 cm ³	$\frac{20}{20} = 1 \text{ g/cm}^3$